EXAMINING THE EFFECT OF TARGETED ORGANIZATIONAL FORGETTING ON JOB PERFORMANCE IN ARVAND PETROCHEMICAL COMPANY

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Abstract. The purpose of this study is to investigate the effect of targeted organizational forgetting on job performance in Arvand Petrochemical Company. The current research, in terms of purpose, is in the applied research group and, in terms of research type, is in the category of descriptive-causal research. Considering the data collection tools, which their aim is to describe the conditions or the phenomenon examined, this research is of a descriptive study type and since data collection in this study is supported by library studies and a questionnaire, it can be put into the field research group. The reliability of the questionnaire and its dimensions in this research was estimated using SPSS software and Cronbach's alpha. According to the result, which is above the minimum of 0.7, the reliability of the questionnaire was confirmed. The questionnaire consisted of three sections related to the considered variables and was ranked by Likert scale and the statistical population was measured. The coefficient between the variable of targeted organizational forgetting and the job performance is equal to 0.590 and the corresponding t value is 9.649>1.96, so according to the t test, with a critical value of 0.05 at 95% confidence level, the null hypothesis can be rejected. As a result, with a 95% confidence, it can be said that targeted organizational forgetting has a significant effect on job performance. The results of the analysis of the first hypothesis of the research showed that "targeted organizational forgetting has a significant effect on job performance in Arvand Petrochemical Company". The coefficient between the targeted organizational forgetting and organizational learning equals 0.766 and the corresponding t value is 9.775>1.96, which according to t test with a critical value of 0.05 at a 95% confidence level, the null hypothesis can be rejected. As a result, with a 95% confidence, it can be said that targeted organizational forgetting has a significant effect on organizational learning.

Key words: targeted organizational forgetting, organizational learning, job performance, knowledge management

Introduction. Since Headberg (2010), more than two decades ago, published his article "How Organizations Learn and Forget", research on organizational learning and learning organizations has expanded. Nowadays, knowledge management issues have been considered by research centers as one of the most important research priorities; however, managers' willingness to use knowledge management at their organization level has increased. Hence, the development and use of valuable resources, which can guarantee the survival of organizations in today's competitive world, is a very important issue. This development process can be named learning. The effective role of knowledge in the life cycle of an organization has led us to ignore this fact that "organizations should not only seek to learn, but also have to forget some of the things." (De Holan & Phillips, 2014).

One of the issues related to information, is how to get it and keep it, and forget it in a conscious and unconscious way. For two reasons, dealing with organizational forgetting is vital. The first is that the loss of the unconscious knowledge imposes a lot of costs on them. Secondly, organizational learning is related to the organizational forgetting process, and organizations that want to transform must not only be familiar with new knowledge capabilities, but also must forget about old knowledge. On the one hand, from a psychological point of view, Campbell describes job performance as a variable level of individual performance. Campbell describes the dimensions of job performance as follows: performance versus output, relevance to organizational goals, and multi-dimensionality. Job performance embodies the scope of organizational behavior that is related to the job of individuals and is in line with the goals of the organization. Definition of job performance mainly emphasizes behavior in comparison with results. In a comprehensive definition, job performance involves behavior and results. This definition of organizational performance points to the fact that in job performance, both inputs (behavior) and outcomes (results) must be considered.
Theoretical foundation
Targeted organizational forgetting:
A set of actions an organization does to facilitate the forgetting of unnecessary data and prevent the destruction of useful data. This set of actions takes place in three areas: planning, implementation, evaluation (Sadat, 2010).

Unconscious forgetting:
The followings leads to unconscious forgetting in organizations: (Sadat, 2010)
• The lack of applying knowledge from learning
• Inability to codify and document knowledge
• Not having the incentive to share knowledge

Table 2.1. The states of organizational forgetting from the perspective of De Holan & Phillips (Sadat, 2010)

<table>
<thead>
<tr>
<th>New knowledge</th>
<th>Existing knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconscious</td>
<td>The inability to gain knowledge</td>
</tr>
<tr>
<td></td>
<td>Destruction of memory</td>
</tr>
<tr>
<td>Targeted</td>
<td>Eliminating learning</td>
</tr>
<tr>
<td></td>
<td>Avoiding bad habits</td>
</tr>
</tbody>
</table>

Organizational forgetting and competitive advantage (competitiveness). By studying the theoretical foundations of knowledge management, learning, strategic issues and competitive advantage, it is inferred that there is a close relationship between knowledge management, learning and gaining competitive advantage, to the extent that learning and competitive advantage can be considered equivalent to each other. Similarly, in relation to the relationship between knowledge and competitive advantage, there is a lot of emphasis on research literature, to the extent that knowledge can be considered as the best source and only sustainable competitive advantage. In short, learning and acquiring knowledge can bring competitive advantage and competitiveness (Moshbbaki and Rabieh, 2009). After decades of research, the link between organizational learning and competitive advantage is clear, because companies that are superior in learning have a better chance of confronting opportunities and enjoying it in facing threats and removing them, in particular, when a significant organizational change is needed. Companies that are capable of generating new knowledge (learning organizations) are able to innovate more efficiently and change the environmental conditions quickly, so that they can gain competitive advantage over companies that do not have this capability. Of course, competitiveness and the acquisition of competitive advantage are not only specific to learning, but the forgetting of inappropriate knowledge at the right time (targeted forgetting) can also lead to competitive advantage (Moshbbaki and Rabieh, 2009). Regarding the relationship between organizational forgetting and competitive advantage, the following results can be deduced by reviewing the research literature. Indirectly, research has been done on non-targeted organizational forgetting, but with regard to targeted forgetting, research is scarce. In terms of strategic management concepts, the targeted organizational forgetting, which can be described as strategic forgetting, has a profound relationship with the strategic issues of the organization. In fact, targeted organizational forgetting lies at the heart and center of the strategic management of the learning organization. With the development of the theory of strategic forgetting, perhaps the theory of the forgetting organization may be reached (Moshbbaki and Rabieh, 2009).

Figure 2-4: The relationship of the type of forgetting with competitiveness (Moshbbaki and Rabieh, 2009).

The key concepts of job performance
This section discusses some of the commonly used concepts and terminology in performance evaluation, such as performance, performance management, standard indexes, as well as efficiency, effectiveness, and cost effectiveness and productivity that are closely related to the concepts of performance evaluation. But before discussing these concepts, two concepts of input and output and objectives are presented to clarify these concepts (Ali Rezaee et al., 2012).
1. **Input**: A set of resources and facilities that organizations use. The main sources in each organization is its human resources. Costs, capitals and technologies, opportunities, privileges, etc. can also be sources of the organization, which are not necessarily in the form of money and cannot be expressed in the form of money.

2. **Output**: The output of the activities of the operating departments of the organization, the various forms of production, the volume of operational tasks performed by the organization, etc., are its outputs. These may also not be in the form of money or they cannot be expressed in the form of money (Ali Rezaee et al., 2012).

**Objectives**: The objectives of an organization are the existential philosophy of an organization, for which the organization has been established and is working to realize (Rezaee et al., 2012).

Relationships between inputs and outputs and objectives of the organization are defined by the concepts of efficiency and effectiveness and cost-effectiveness (Rezaee et al., 2012).

The efficiency of the organization shows the extent to which the organization's outputs are realized according to its inputs. This size is at best equal to one. In this state, the organization is called efficient and in less than one, it is called inefficient. The effectiveness of the organization shows the extent to which the organization's objectives are realized according to the realized inputs of the organization. This size is also, at best state, equal to one. The organization's cost-effectiveness shows the extent to which the organization's objectives are realized according to its inputs. This size is, at best, equal to one. The relationship between inputs and outputs and objectives is illustrated in the figure below with the help of the links of efficiency, effectiveness and cost-effectiveness (Rezaee et al., 2012). Figure (16-2): The relationship between inputs and outputs and objectives with the help of the links of efficiency, effectiveness and cost-effectiveness (Rezaee et al., 2012).
The background of research:

Internal investigations

1- Bipeta et al. (2017) have conducted a research entitled "The impact of organizational forgetting on human resource productivity with the mediating role of empowerment." Organizational forgetting is the ability to eliminate obsolete and inefficient knowledge, and it is considered as an important part of the dynamics of knowledge in organizations. The purpose of this study was to investigate the effect of organizational forgetting and effective factors on human resource productivity through the mediation of empowerment among employees of state banks in Semnan Township. In this study, three hypotheses were studied. The statistical population of this research includes all employees of state banks in Semnan Township and has 294 people. The research sample consisted of 170 employees, selected by stratified random sampling method using Morgan table. The research method was descriptive-survey and correlational. In order to collect data, Salavati et al.’s Organizational Forgetting Questionnaire, Spreitzer Empowerment Standard Questionnaire and Standard Questionnaire of Human Resources Productivity of Hersey and Goldsmith were used. In order to analyze the data, structural equation model was used. The results of this study showed that organizational forgetting has a significant relationship with factors affecting human resource productivity. This relationship is more robust, especially when the mediating variable empowerment enters the equation. In other words, it can be said that empowerment increases the severity of the relationship between organizational forgetting and factors affecting human resource productivity.

2- Isma'ili et al. (2016) have conducted a research entitled "The Role of Organizational Intelligence in Targeted Organizational Forgetting." In today's research, organizational intelligence and organizational forgetting are variables that have a significant impact on the performance of employees and organizations. The purpose of this study was to investigate the effect of organizational intelligence on targeted organizational forgetting in state agencies of Ilam City. The statistical population consists of all managers and employees of Ilam Petrochemical Company, which its number is 400. Using Morgan's table, 196 people were selected for sample. Also, for collecting data, two standard questionnaires of organizational intelligence and targeted organizational forgetting were distributed among 196 people. The collected data was analyzed using LIZREL and SPSS software. Based on the findings of the research, it can be concluded that organizational intelligence and its dimensions, that is, strategic insight, shared destiny, morale, knowledge use, functional pressure, unity, and desire to change, have a significant effect on targeted organizational obsolescence in government agencies in the city of Ilam.

3. Khanlari et al. (2013) conducted a research entitled "investigating the relationship between organizational learning and financial performance through the process of innovation on the organizational forgetting of Golpayegan industrial companies". The main purpose of their research was to investigate the effect of organizational learning on the financial performance of companies through the process of innovation and to examine the impact of organizational learning with innovation and innovation with financial performance. After analyzing the data using the LISREL software, all three hypotheses were accepted in the research.

External investigations. 1. Saynder and Kuming (2018) have conducted a research entitled "Explaining the dimensions of organizational forgetting and the absorption capacity of organizational knowledge." The purpose of this paper is to explain the dimensions of knowledge absorption capacity and organizational forgetting and examine the relationships between them. In this regard, first, we will describe and introduce the dimensions of the variables of the capacity to absorb knowledge and organizational forgetting. And then, given the background overview and subject literature, we will present the appropriate hypotheses. This research is a causal survey and the statistical population of the study is 772 employees of the Swiss Police University, which includes faculty members and staff of the university. Using the Cochran formula, with a confidence level of 95%, the studied sample size was selected 257 people. In order to collect data, a questionnaire was used which was distributed among sample members. Its face and content validity was approved by management professors and its reliability was confirmed by using Cronbach's alpha and the software SPSS 19 (for all dimensions larger than 0.7). Finally, exploratory factor analysis and structural equation modeling were used to analyze the collected data. To investigate the research hypotheses, exploratory and confirmatory factor analyses were used. The results show that each aspect of organizational forgetting is influenced by the size of knowledge absorption capacity, while the decline dimension of the organizational forgetting variable has the greatest impact on the utilization of the variable of knowledge absorption capacity.

2. Nicholas Roberts et al. (2015), in a study entitled "Investigating the agility of corporate customers and corporate performance and targeted organizational forgetting" state that in today's highly competitive environment, companies that are keen on agility will be more successful.

3. Azevedo et al. (2015) conducted a study entitled "An integrated model for assessing targeted organizational forgetting and agility and lean production in the automotive industry" with the aim of suggesting an indicator for assessing the agility and leanness of companies and their supply chains. This indicator is known as
Agilean and is integrated as a model using a set of agile and lean supply chain assessment techniques. In order to develop a series of agility and lean production weights in the company, the Delphi method and SCM (Supply Chain Management) practices as well as models proposed for research in the automotive industry were used. Agilean is, in fact, the lean model of SCM, which causes agility in the automotive industry.

4. Mattiacalan et al. (2013) describe agility as the ability of an organization to identify changes (which can be opportunities or threats or a combination of both) in their business environment and, consequently, provide focused and quick responses to customers and shareholders and resetting their resources, processes, and strategies.

5. Dove (2012) refers in a directional definition to another basic characteristic of agile organizations, namely, their knowledge-based, and defines agility as the ability to manage and apply effectively knowledge. As can be seen, the change, uncertainty and the rate of adaptation and accountability constitute the main components of the agility definitions, which are considered in different definitions in different but convergent forms. In fact, agility is an answer to challenges for the rapid and continuous change of world markets for excellent quality, excellent performance and customer service. Agile organizations not only survive in such environments, but also take advantage of this varied and uncertain environment.

**Research method.** The current research, in terms of purpose, is placed in the category of applied research and, in terms of research type, is placed in the category of descriptive-causal research. Since current research has used data collection tools whose purpose is to describe the circumstances or the phenomenon studied, this research is a descriptive study type and since the data collection in this study is supported by library studies and a questionnaire, it can be put into the field research group.

The statistical population of this research is all employees of Arvand Petrochemical Company, which, according to the accomplished surveys, is about 800 people. The sample size will be determined using convenient random sampling method and Morgan table.

To determine the minimum required sample size, the Cochran formula was used for a limited population.

The minimum required sample size is 254 people.

The questionnaire consists of 2 major parts:

1. The first part of the organizational forgetting questionnaire consists of questions 1 to 5, which is in the Likert spectrum and is derived from the paper of Peressmislav (2017).

2. The second part of the job performance questionnaire consists of questions 6 to 16, which is in the Likert spectrum and is derived from the paper of Peressmislav (2017).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Kurtosis</th>
<th>Skewness</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted organizational forgetting</td>
<td>2.157</td>
<td>1.278</td>
<td>Normal</td>
</tr>
<tr>
<td>Job performance</td>
<td>0.063</td>
<td>0.826</td>
<td>Normal</td>
</tr>
</tbody>
</table>

The amount of skewness is in the range of 3 to -3, and the amount of kurtosis is in the range of 5 to -5, so all questions have a normal distribution.

According to the algorithm of data analysis in the PLS method, after calculating the factor loadings of questions, it is time to calculate and report the Cronbach's alpha coefficients and the AVE value.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard values</th>
<th>Estimated values</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fit index of the Cronbach's alpha research model</td>
<td>More than 0.7</td>
<td>0.888114</td>
</tr>
<tr>
<td>Targeted organizational forgetting</td>
<td>More than 0.7</td>
<td>0.782147</td>
</tr>
<tr>
<td>Job performance</td>
<td>More than 0.7</td>
<td>0.782147</td>
</tr>
</tbody>
</table>

As can be seen in Table (8-4), the value of these criteria for all three constructs is higher than 0.7, which shows the good reliability of the model.

**Average variance extracted (AVE)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard values</th>
<th>Estimated values</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fit index of AVE</td>
<td>More than 0.5</td>
<td>0.688114</td>
</tr>
<tr>
<td>Targeted organizational forgetting</td>
<td>More than 0.5</td>
<td>0.632222</td>
</tr>
<tr>
<td>Job performance</td>
<td>More than 0.5</td>
<td>0.632222</td>
</tr>
</tbody>
</table>

As can be seen in Table (9-4), the value of these criteria for both constructs is higher than 0.5, which shows the good convergent validity of the model.
**Structural model fit**
According to the data analysis algorithm in the PLS method, after examining the fit of the measurement models, it is time to fit the structural model of the research. As already mentioned, the section of the structural model does not work with questions, and only the hidden variables and relationships between them are examined.

• **Z-significance coefficients (t-values)**
Table (10-4): Model fit index

<table>
<thead>
<tr>
<th>t-value</th>
<th>Standard values</th>
<th>Estimated values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted organizational forgetting</td>
<td>Less than 1.96</td>
<td>0.170</td>
</tr>
<tr>
<td>Job performance</td>
<td>More than 1.96</td>
<td>6.588</td>
</tr>
</tbody>
</table>

As can be seen in Table (10-4), the value of these criteria for all constructs is higher than 1.96, except for targeted organizational forgetting, which is 0.170. The reason for the high number of 6.588 is the high correlation between the research variables.

• **R-squared criterion**
As noted earlier, this criterion shows the effect of an exogenous variable on an endogenous variable, and considers three values of 0.19, 0.33 and 0.67 as three criteria values for weak, moderate, and strong R2 values.

Table (11-4): Convergent validity fit index

<table>
<thead>
<tr>
<th>R squared values</th>
<th>Standard values</th>
<th>Estimated values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted organizational forgetting</td>
<td>0.190, 0.333 and 0.673</td>
<td>0.791</td>
</tr>
<tr>
<td>Organizational learning</td>
<td>0.190, 0.333 and 0.673</td>
<td>0.691</td>
</tr>
<tr>
<td>Job performance</td>
<td>0.190, 0.333 and 0.673</td>
<td>0.802</td>
</tr>
</tbody>
</table>

According to Table (11-4), the value of R2 for endogenous constructs, according to the four values of the criterion, confirms the appropriateness of the structural model fit.

• **GOF criterion**
This criterion is calculated using the following formula:

\[ GOF = \sqrt{\text{Communalities} \times R^2} \]

Table (12-4): Shared values of communalities

<table>
<thead>
<tr>
<th>Construct</th>
<th>Shared values</th>
<th>communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeted organizational forgetting</td>
<td>0.688114</td>
<td>0.660505</td>
</tr>
<tr>
<td>Organizational learning</td>
<td>0.782147</td>
<td></td>
</tr>
</tbody>
</table>

Table (13-4): R squared values

<table>
<thead>
<tr>
<th>Construct</th>
<th>R squared values</th>
<th>0.791</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job performance</td>
<td></td>
<td>0.791</td>
</tr>
</tbody>
</table>

Therefore GOF value equals to:

\[ GOF = \sqrt{\text{Communalities} \times R^2} = \sqrt{0.66055 \times 0.791} = 0.7228 \]

Considering that three values of 0.01, 0.25 and 0.36 have introduced as weak, moderate and strong for GOF, the overall fit of the model is confirmed by achieving the value of 0.7228. (Due to the fact that real data and outliers were removed, the overall fit of the model has risen).

The test of research hypotheses

Targeted organizational forgetting has a significant effect on job performance in Arvand Petrochemical Company.

\[
\begin{align*}
H_0: & \ t<1.96 \\
H_1: & \ t\geq1.96
\end{align*}
\]

Hypothesis test

Targeted organizational forgetting has no significant effect on job performance. \( H_0: \ t<1.96 \)
Targeted organizational forgetting has a significant effect on job performance. \( H_1: \ t\geq1.96 \)
According to table (14-4), the path coefficient between the targeted organizational forgetting and the job performance is 0.590 and the corresponding t value is 9.649>1.96, which according to the t test with a critical value of 0.05 at 95% confidence level, the null hypothesis can be rejected. As a result, it can be said with 95% confidence that targeted organizational forgetting has a significant effect on job performance.

**Research suggestions**

According to the test results, the following suggestions are presented:

1. Employee involvement in organizational decisions
2. Holding in-service training classes
3. Strengthening organizational support, providing appropriate opportunities for professional development, increasing the general information of staff, and organizing periodic meetings of managers for responsibility-creating participation of selected employees in the decision making, organizational meetings and in-center meetings, staff and managers should be encouraged to promote organizational performance stability and administrative efficiency because of increase in civic behavior.

According to the test results of the second hypothesis, the following suggestions are presented:

4. In order to further increase employee assistance to other colleagues in day-to-day work or during their vacation, as well as to help newcomers and newly employed individuals, these behaviors are modeled as supportive behaviors of managers so that employees put this kind of supportive behaviors on the part of managers as a model for themselves in dealing with other colleagues in order to enhance their sense of altruism.

5. Management should increase more and more importance for the position of employees in the organization and the role of their behaviors in organizational outcomes and processes, such as performance appraisal systems, rewards and wages systems, and increases perceived employee support to enhance and improve organizational citizenship behavior through strategies such as restoring rewards and pay systems, maintaining human dignity, timely and adequate delivery of information on welfare measures, increasing cash benefits and promoting the welfare level of the workforce life.

6. Managers should increase their informal communications with employees and support them. This can be done through the support of managers from the ideas and suggestions of the staff. Of course, it should be kept in mind that this support is in practice and not in appearance, because if the support is in appearance, the result may be the opposite.

7. In order to encourage individuals to increase this feature, which leads to the promotion of managerial and organizational efficiency, the authority to give permission to staff to go vacation is focused, and instead of the officials of the different centers, the leave of each member is approved and issued by the management of administrative affairs. This could help to further discipline, accurate control over the presence and absence and organize the administrative system.

8. Employee access to information needed about the decision making and goals and performance of the organization

9. Managers need to connect more with employees and pay more attention to their needs.

10. Suitable and competent people should be assigned to appropriate organizational posts, and justice must be respected in paying rewards.

11. Employees must have the freedom and independence required to perform their duties.

12. The requirements for submitting an offer at all levels by all employees in the organization should be provided.

Referring to the problem statement and the analysis presented in this thesis, the followings can be presented as recommendations for future research in relation to the topic of this thesis:

- Testing the model of this research in other industries can determine further the validity of the model.
- In future research, other industries, as well as a sample with wider demographic characteristics, be investigated.
- The conceptual model test of the present research in industrial companies.
- Examining various moderating variables in the model.
References

5. Fallahi A, Freudian AH (2014). Describing and explaining the process of active knowledge forgetting, Islamic Azad University, Electronic Unit.